UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,918	07/29/2003	Brian D. Gragg	200210214-1	8126

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EXAMINER
CHERY, MARDOCHEE

ART UNIT	PAPER NUMBER
2188	

DATE MAILED: 04/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/628,918	GRAGG, BRIAN D.
Office Action Summary	Examiner	Art Unit	
	Mardochee Chery	2188	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>09 December 2005</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-27</u> is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-27</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)   4)☐ Interview Summary (PTO-413)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   Paper No(s)/Mail Date. _____ .
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)   5)☐ Notice of Informal Patent Application (PTO-152)
   Paper No(s)/Mail Date _____ .   6)☐ Other: _____ .

DETAILED ACTION

Response to Amendment

1.   This Office Action is in response to Applicant's communication filed on December 9, 2005 in response to PTO Office Action mailed on September 8, 2005. The Applicant's remarks and amendments to the claims and/or the specification were considered with the results that follow.

2.   In response to the Office Action mailed on September 2005, no claims have been added or canceled. Consequently, claims 1-27 remain pending.

3.   The rejection of claims 14, 17, 22 and 27 have been withdrawn due to the amendment filed December 9, 2005.

Response to Arguments

4.   The rejection of claim 11 under 35 USC 101 still holds because instructions/code are the data embodied in computer readable storage medium as required and pointed out in Beauregard and Lowry not "the article of manufacture" described in the specification (page 2 of the specification a computer-readable medium is defined as "signals and carrier wave/pulse).

5.   Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

6.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

the claimed invention is directed to non-statutory subject matter. Claim 11 recites "an article of manufacture embodied in a computer-readable medium" while on page 2 of the specification a computer-readable medium is defined as "signals and carrier wave/pulse". Claims 12-19, directly depending upon claim 11, bare the same deficiency and therefore are nonstatutory.

Claim Rejections - 35 USC § 112

7.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8.   Claims 2-3, 14 and 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claims recite a sector-level protocol. However, the specification does not fully describe a sector-level protocol in such a way that would enable one of ordinary skill in the art to implement the same. As such, the broadest reasonable interpretation is in view.

Claim Rejections - 35 USC § 102

9.   The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10.   Claims 1-27 are rejected under 35 U.S.C. 102(b) as being anticipated by ,

HP color Laser Jet 4600 User Guide (First edition: April 2002; Part Number:

C9660-90912).

As per claim 1, HP color Laser Jet 4600 User Guide discloses an image

forming device comprising: a storage device for storing data [page 58]; and a

storage access manager configured to coordinate access to the storage device

from a plurality of client devices that communicate with the storage device using

at least one uncoordinating communication protocol [pages 47-52].

As per claims 2 and 3, HP color Laser Jet 4600 User Guide discloses the

sector-level communication protocol includes a universal serial bus protocol and

the file-level communication protocol includes a common internet file system

protocol [pages 47-48].

As per claim 4, HP color Laser Jet 4600 User Guide discloses the storage access manager further includes a contention matrix configured to determine contention states for accessing the storage for accessing the storage device [pages 49-52].

As per claim 5, HP color Laser Jet 4600 User Guide discloses a universal serial bus communication port for communicating to the storage device and, a network communication port for communicating to the storage device [page 53].

As per claim 6, HP color Laser Jet 4600 User Guide discloses a plurality of universal serial bus communication ports configured to provide access to the storage device [page 53].

As per claim 7, HP color Laser Jet 4600 User Guide discloses the storage device includes logic to notify a client device whether an access request for the storage device is permissible [pages 47-48].

As per claim 8, HP color Laser Jet 4600 User Guide discloses the storage access manager is embodied as logic [page 48].

As per claim 9, HP color Laser Jet 4600 User Guide discloses the storage device is one or more memory cards [pages 211-215].

As per claim 10, HP color Laser Jet 4600 User Guide discloses the storage access manager includes storage access manager means to coordinate the access to the storage device [pages 216-217].

As per claim 11, HP color Laser Jet 4600 User Guide discloses an article of manufacture embodied in a computer-readable medium for use in an image forming device having a storage device accessible by at least a first communication protocol and a second communication protocol, the article of manufacture comprising first processor executable instructions for causing a processor to maintain a current access state for the storage device [pages 47-50] second processor executable instructions for causing a processor to determine a contention status between the current access state and a received access request for accessing the storage device based on a contention logic, the contention logic defining rights for simultaneous access to the storage device from the at least first communication protocol and the second communication protocol [pages 50-53]; and third processor executable instructions for causing a processor to determine whether the received access request is permissible based on the contention status [pages 54-57].

As per claim 12, HP color Laser Jet 4600 User Guide discloses the contention logic is configured to coordinate simultaneous access to the storage device by one or more clients using the first communication protocol and one or more clients using the second communication protocol [pages 47-52].

As per claim 13, the rationale in the rejection of claims 4 and 7 is herein incorporated.

As per claim 14, HP color Laser Jet 4600 User Guide discloses the contention logic is configured based on the first communication protocol being a sector-level protocol and the second communication protocol being a file-level protocol [protocol for accessing instructions stored in a read-only memory unit inside the printer and accessing a partition of memory with a specific address using for instance UNIX operating system; page 55].

As per claim 15, HP color Laser Jet 4600 User Guide discloses at least a first communication protocol and the second communication protocol include at least one uncoordinating communication protocol [pages 48-52].

As per claim 16, HP color Laser Jet 4600 User Guide discloses fourth processor executable instructions for causing a processor to notify a first client when access to the storage device occurs by a second client [page 20].

As per claim 17, HP color Laser Jet 4600 User Guide discloses the at least first and the second communication protocols include the same protocol [pages 53-55].

As per claim 18, HP color Laser Jet 4600 User Guide discloses fifth processor executable instructions for causing a processor to assign an identifier to each client requesting access to the storage device [pages 49-53].

As per claim 19, HP color Laser Jet 4600 User Guide discloses the second processor executable instructions include storage access manager means for controlling access to the storage device [page 211-212].

As per claim 20, the rationale in the rejection of claims 2, 4, and 7 is herein incorporated.

As per claim 21, the rationale in the rejection of claim 4 is herein incorporated.

As per claim 22, the rationale in the rejection of claim 3 is herein incorporated.

As per claims 23 and 25, the rationale in the rejection of claim 7 is herein incorporated.

As per claim 24, the rationale in the rejection of claim 18 is herein incorporated.

As per claim 26, the rationale in the rejection of claim 15 is herein

incorporated.

As per claim 27, the rationale in the rejection of claim 17 is herein

incorporated.

Claim Rejections - 35 USC § 102

11.   The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12.   Claims 1-27 are rejected under 35 U.S.C. 102(e) as being anticipated by

McIntyre (2003/0063305).

As per claim 1, McIntyre discloses an image forming device comprising: a

storage device for storing data [Fig. 1; ¶ 22]; and a storage access manager

configured to coordinate access to the storage device from a plurality of client

devices that communicate with the storage device using at least one

uncoordinating communication protocol [¶ 23].

As per claims 2 and 3, McIntyre discloses the sector-level communication

protocol includes a universal serial bus protocol and the file-level communication

protocol includes a common internet file system protocol [pa¶ 23].

As per claim 4, McIntyre discloses the storage access manager further includes a

contention matrix configured to determine contention states for accessing the

storage for accessing the storage device [¶ 33].

As per claim 5, McIntyre discloses a universal serial bus communication

port for communicating to the storage device and, a network communication port

for communicating to the storage device [¶ 23].

As per claim 6, McIntyre discloses a plurality of universal serial bus

communication ports configured to provide access to the storage device [¶ 23].

As per claim 7, McIntyre discloses the storage device includes logic to

notify a client device whether an access request for the storage device is

permissible [¶¶ 22 and 33].

As per claim 8, McIntyre discloses the storage access manager is

embodied as logic [¶ 33].

As per claim 9, McIntyre discloses the storage device is one or more memory cards [¶ 33].

As per claim 10, McIntyre discloses the storage access manager includes storage access manager means to coordinate the access to the storage device [¶ 34].

As per claim 11, McIntyre discloses an article of manufacture embodied in a computer-readable medium for use in an image forming device having a storage device accessible by at least a first communication protocol and a second communication protocol, the article of manufacture comprising first processor executable instructions for causing a processor to maintain a current access state for the storage device [¶¶ 22 and 23] second processor executable instructions for causing a processor to determine a contention status between the current access state and a received access request for accessing the storage device based on a contention logic, the contention logic defining rights for simultaneous access to the storage device from the at least first communication protocol and the second communication protocol [¶ 34]; and third processor executable instructions for causing a processor to determine whether the received access request is permissible based on the contention status [¶ 33].

As per claim 12, McIntyre discloses the contention logic is configured to coordinate simultaneous access to the storage device by one or more clients using the first communication protocol and one or more clients using the second communication protocol [¶¶ 22-23].

As per claim 13, the rationale in the rejection of claims 4 and 7 is herein incorporated.

As per claim 14, McIntyre discloses the contention logic is configured based on the first communication protocol being a sector-level protocol and the second communication protocol being a file-level protocol [¶¶ 5, 22 and 26].

As per claim 15, McIntyre discloses at least a first communication protocol and the second communication protocol include at least one uncoordinating communication protocol [¶ 23].

As per claim 16, McIntyre discloses fourth processor executable instructions for causing a processor to notify a first client when access to the storage device occurs by a second client [¶¶ 22-23].

As per claim 17, McIntyre discloses the at least first and the second communication protocols include the same protocol [¶¶ 23].

As per claim 18, McIntyre discloses fifth processor executable instructions for causing a processor to assign an identifier to each client requesting access to the storage device [¶ 27].

As per claim 19, McIntyre discloses the second processor executable instructions include storage access manager means for controlling access to the storage device [¶¶ 22 and 33].

As per claim 20, the rationale in the rejection of claims 2, 4, and 7 is herein incorporated.

As per claim 21, the rationale in the rejection of claim 4 is herein incorporated.

As per claim 22, the rationale in the rejection of claim 3 is herein incorporated.

As per claims 23 and 25, the rationale in the rejection of claim 7 is herein incorporated.

As per claim 24, the rationale in the rejection of claim 18 is herein incorporated.

As per claim 26, the rationale in the rejection of claim 15 is herein incorporated.

As per claim 27, the rationale in the rejection of claim 17 is herein incorporated.

13.   Claims 1-3, 5-12, 14-20 and 22-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Arakawa (2002/0054339).

As per claim 1, Arakawa discloses an image forming device comprising: a storage device for storing data [Fig. 5]; and a storage access manager configured to coordinate access to the storage device from a plurality of client devices that communicate with the storage device using at least one uncoordinating communication protocol [Figs. 1 and 5; ¶¶ 60-65].

As per claims 2 and 3, Arakawa discloses the sector-level communication protocol includes a universal serial bus protocol and the file-level communication protocol includes a common internet file system protocol [¶¶ 74, 77].

As per claim 5, Arakawa discloses a universal serial bus communication port for communicating to the storage device and, a network communication port for communicating to the storage device [Fig. 1].

As per claim 6, Arakawa discloses a plurality of universal serial bus

communication ports configured to provide access to the storage device [Fig. 1].

As per claim 7, Arakawa discloses the storage device includes logic to

notify a client device whether an access request for the storage device is

permissible [Figs. 5-6, ¶ 67].

As per claim 8, Arakawa discloses the storage access manager is

embodied as logic [Fig. 6].

As per claim 9, Arakawa discloses the storage device is one or more

memory cards [¶ 193].

As per claim 10, Arakawa discloses the storage access manager includes

storage access manager means to coordinate the access to the storage device

[Fig. 6].

As per claim 11, Arakawa discloses an article of manufacture embodied in

a computer-readable medium for use in an image forming device having a

storage device accessible by at least a first communication protocol and a

second communication protocol, the article of manufacture comprising first

processor executable instructions for causing a processor to maintain a current

access state for the storage device [Figs. 1 and 5; ¶¶ 60-65] second processor

executable instructions for causing a processor to determine a contention status

between the current access state and a received access request for accessing

the storage device based on a contention logic, the contention logic defining

rights for simultaneous access to the storage device from the at least first

communication protocol and the second communication protocol [Figs. 1 and 5;

¶¶ 60-65]; and third processor executable instructions for causing a processor to

determine whether the received access request is permissible based on the

contention status [Figs. 4-6; ¶¶ 60-65].

As per claim 12, Arakawa discloses the contention logic is configured to

coordinate simultaneous access to the storage device by one or more clients

using the first communication protocol and one or more clients using the second

communication protocol [Fig. 1].

As per claim 14, the rationale in the rejection of claim 2 is herein

incorporated.

As per claim 15, the rationale in the rejection of claim 1 is herein

incorporated.

As per claim 16, Arakawa discloses fourth processor executable

instructions for causing a processor to notify a first client when access to the

storage device occurs by a second client [Fig. 1].

As per claim 17, Arakawa discloses the at least first and the second communication protocols include the same protocol [Fig. 1].

As per claim 18, Arakawa discloses fifth processor executable instructions for causing a processor to assign an identifier to each client requesting access to the storage device [Figs 8-9].

As per claim 19, Arakawa discloses the second processor executable instructions include storage access manager means for controlling access to the storage device [Fig. 5].

As per claim 20, the rationale in the rejection of claims 2, 4, and 7 is herein incorporated.

As per claim 22, the rationale in the rejection of claim 3 is herein incorporated.

As per claims 23 and 25, the rationale in the rejection of claim 7 is herein incorporated.

As per claim 24, the rationale in the rejection of claim 18 is herein

incorporated.

As per claim 26, the rationale in the rejection of claim 15 is herein

incorporated.

As per claim 27, the rationale in the rejection of claim 17 is herein

incorporated.

Claim Rejections - 35 USC § 103

14.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described
> as set forth in section 102 of this title, if the differences between the subject matter sought to
> be patented and the prior art are such that the subject matter as a whole would have been
> obvious at the time the invention was made to a person having ordinary skill in the art to which
> said subject matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

15.   Claims 4, 13 and 21 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Arakawa (2002/0054339) as applied to claims 1, 11 and 20

above, and further in view of Erlington (2003/0233544).

As per claim 4, Arakawa discloses the claimed invention as discussed

above in the previous paragraphs. However, Arakawa does not specifically teach

the storage access manager further includes a contention matrix configured to

determine contention states for accessing the storage for accessing the storage device as required by the claim.

Erlingson discloses the storage access manager further includes a contention matrix configured to determine contention states for accessing the storage for accessing the storage device [Figs. 4, 5 and 7; par. 26-27, 76] to allow multiple concurrent users devices to simultaneously access the computer systems (par. 3).

Since the technology for implementing a storage system with a contention matrix to determine contention states for accessing a storage device was well known as evidenced by Erlington, an artisan would have been motivated to implement this feature in the system of Arakawa in order to allow multiple concurrent users devices to simultaneously access the computer systems. Thus, it would have been obvious to one of ordinary skill in the art at the time of invention by Applicant to modify the system of Arakawa to include a contention matrix to determine contention states for accessing a storage device because this would have allowed multiple concurrent users devices to simultaneously access the computer systems (par. 3) as taught by Erlington.

As per claim 21, the rationale in the rejection of claim 4 is herein incorporated.

As per claim 13, the rationale in the rejection of claims 4 and 7 is herein incorporated.

Conclusion

16.   When responding to the office action, Applicant is advised to clearly point out the patentable novelty that he or she thinks the claims present in view of the state of the art disclosed by references cited or the objections made. He or she must also show how the amendments avoid such references or objections. See 37 C.F.R. 1.111(c).

17.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mardochee Chery whose telephone number is (571) 272-4246. The examiner can normally be reached on 8:30A-5:00P.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Manonama Padmanabhan can be reached on (571) 272-4210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
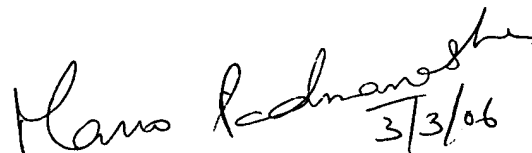
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free).

February 27, 2006

Mardochee Chery
Patent Examiner
AU2188

3/3/06

MANO PADMANABHAN
SUPERVISORY PATENT EXAMINER